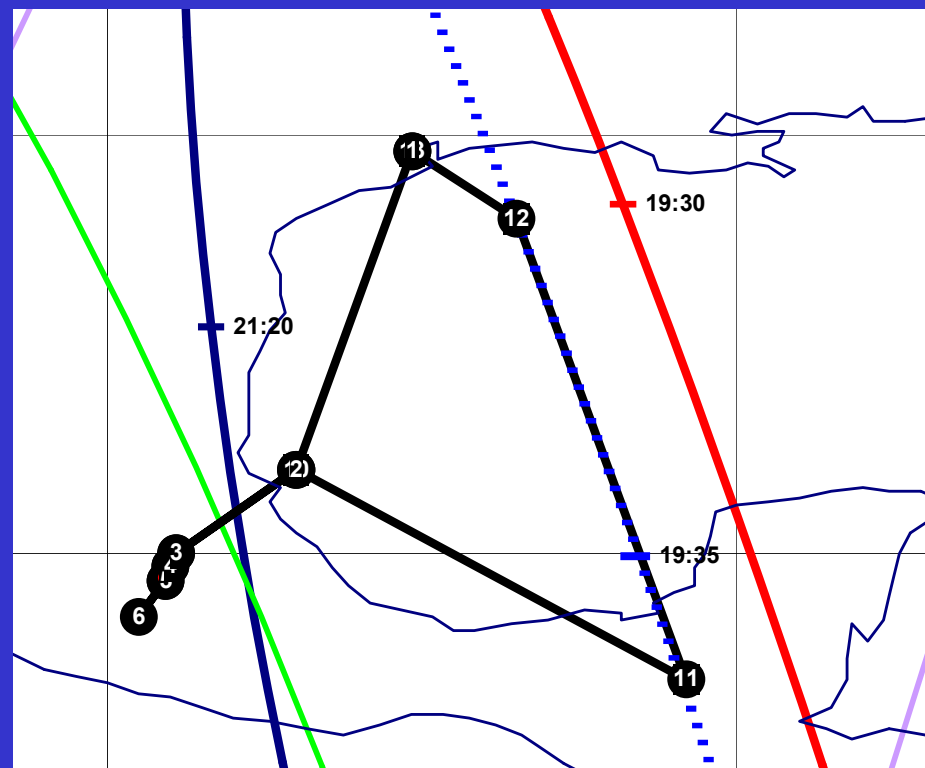


Plan for INTEX-B Flight #7 – Houston local 5 on Thursday 3/16 updated 3/14 @12Z

Objectives:

1. Plume scouting and DIAL curtain over the Mexico City Plume
2. Overpass and in situ characterization of the boundary layer over Mexico City (and T sites)
3. Aerosol characterization spiral with J-31
4. Sample convected biomass burning emissions
5. TES validation track



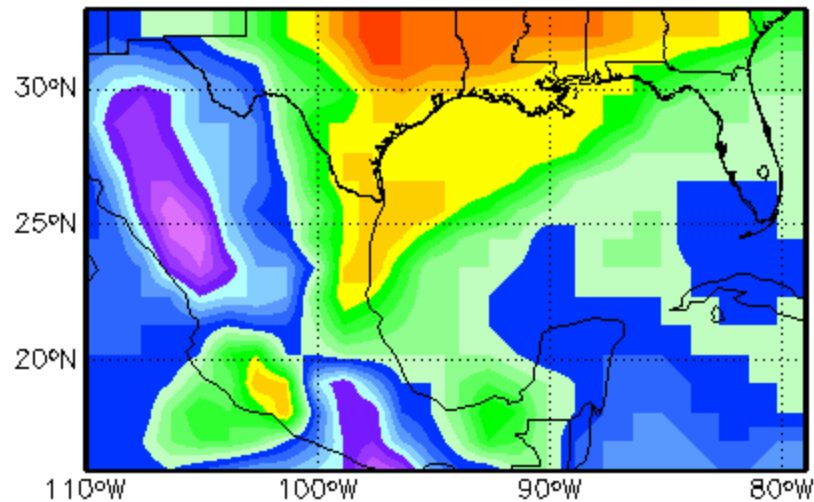
- Take-off at 0830
- Points 2-6: High altitude pass for DIAL
- Points 6-10: Low altitude profiling and boundary layer characterization
- Points 10-11: profiling and J-31 spiral
- Points 11: TES spiral
- Points 11-12: Profiling under TES overpass

Tues 3/14 (18Z)

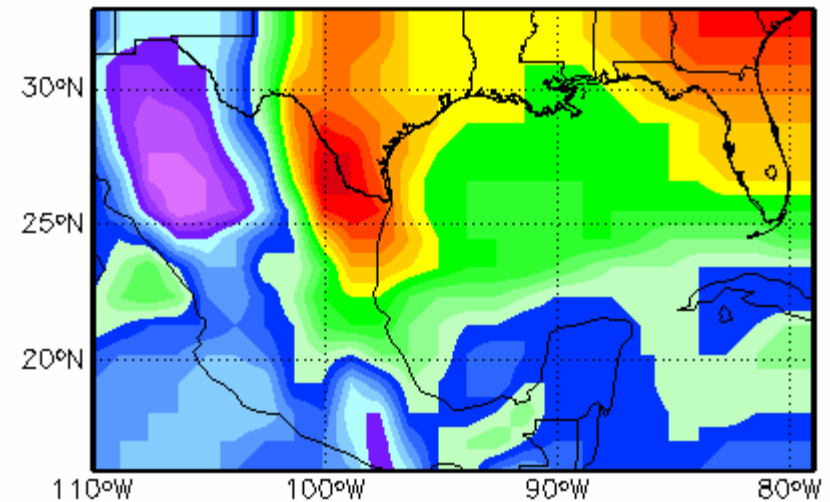
GMAO CO Columns

Wed 3/15 (18Z)

CO columns 20060314 18 GMT

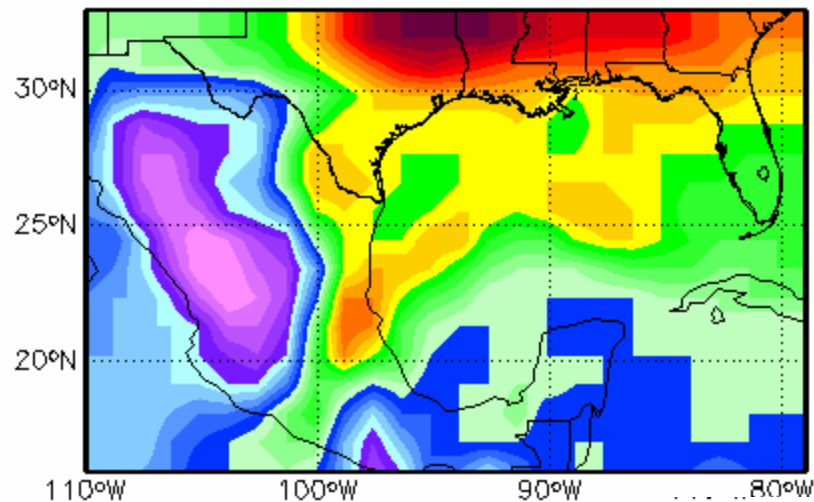


CO columns 20060315 18 GMT



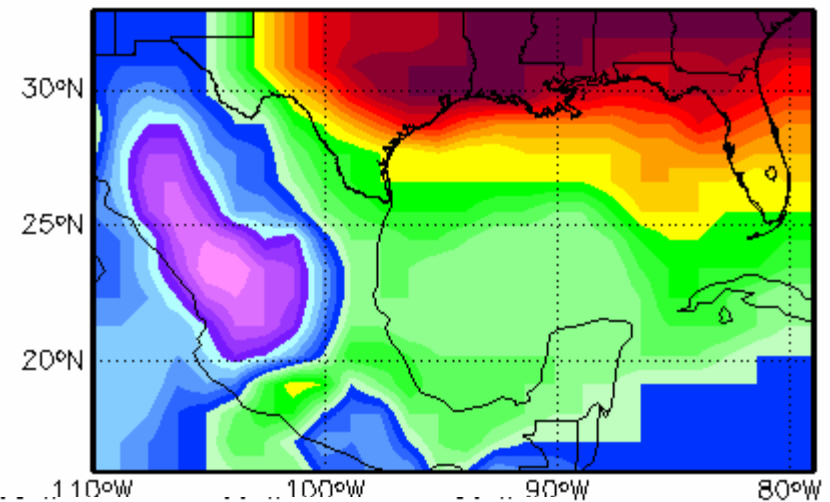
Thurs 3/16 (18Z)

CO columns 20060316 18 GMT



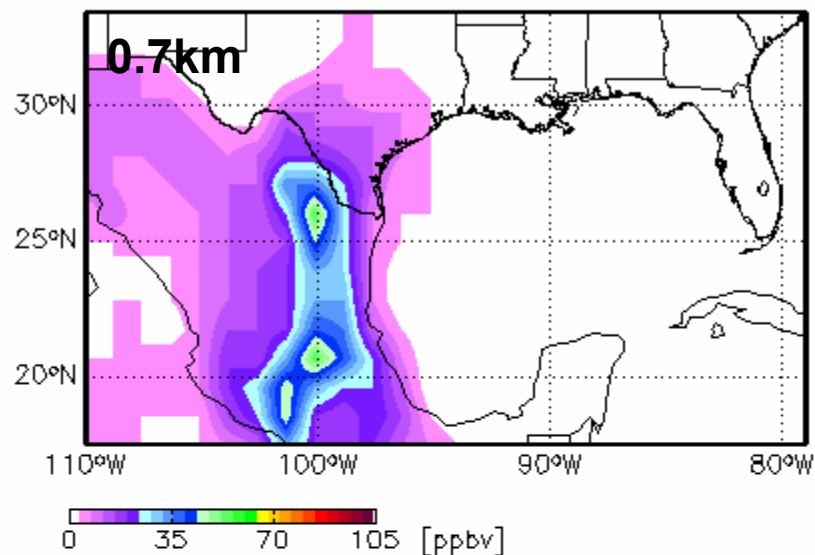
Fri 3/16 (18Z)

CO columns 20060317 18 GMT

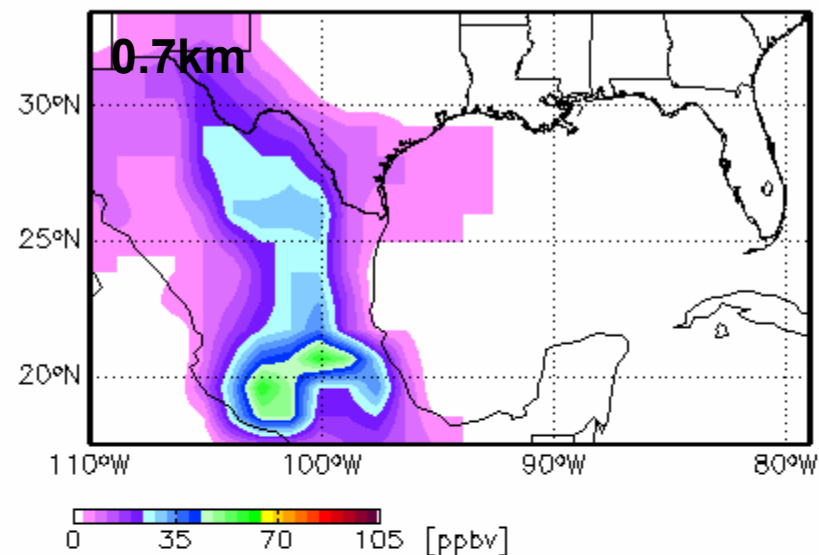


0.70 1.00 1.30 1.60 [10^{18} molec/cm²]

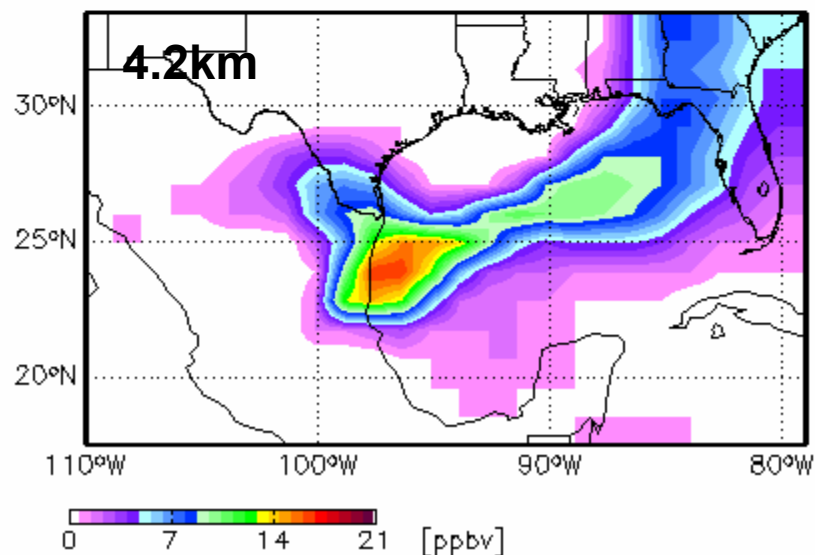
C. American FF CO 20060316 18 GMT at 930 hPa (0.7 km)



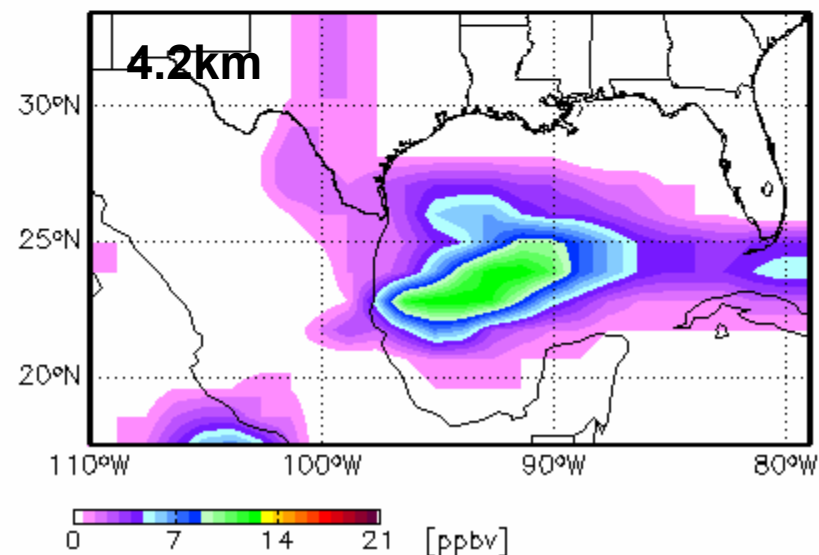
C. American FF CO 20060317 18 GMT at 930 hPa (0.7 km)



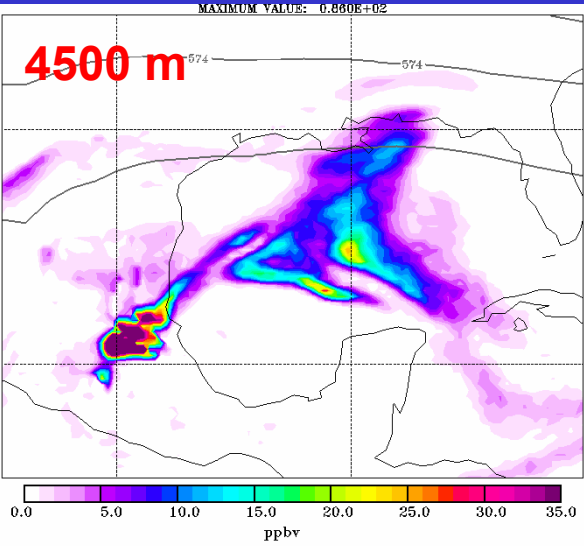
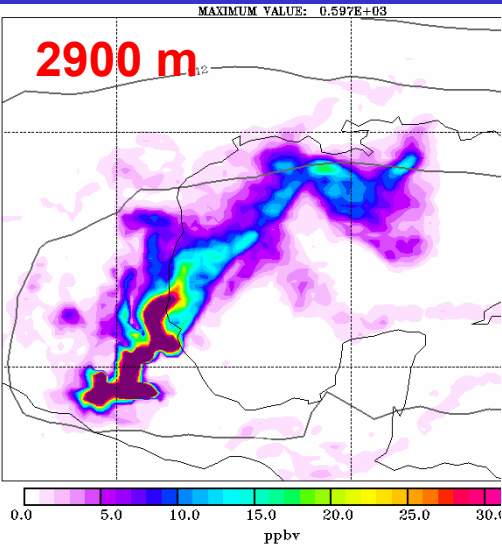
C. American FF CO 20060316 18 GMT at 600 hPa (4.2 km)



C. American FF CO 20060317 18 GMT at 600 hPa (4.2 km)

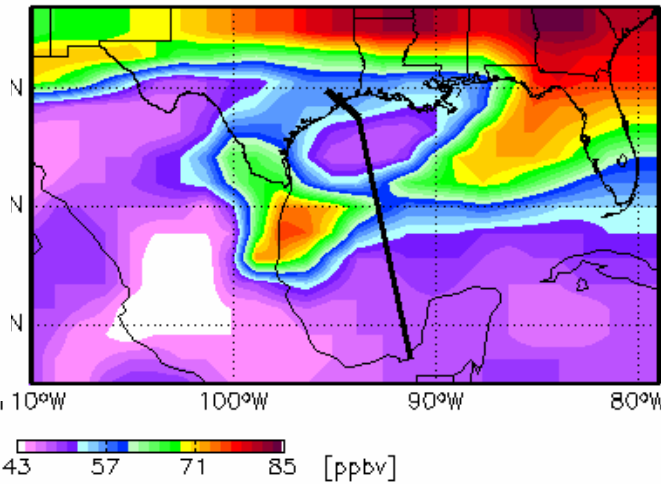


FLEXPART MC CO

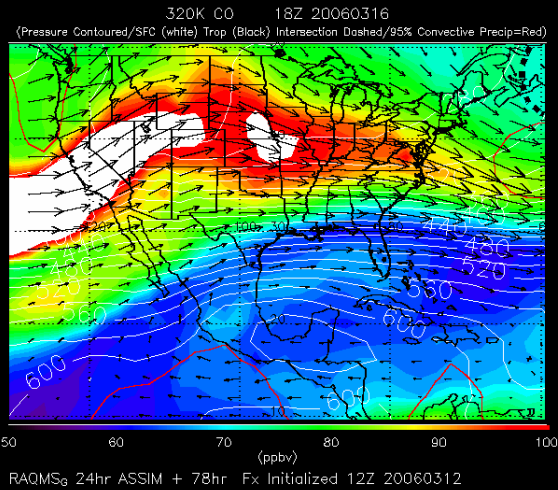


GMAO CO (4200m)

CO 20060316 18 GMT at 600 hPa (4.2 km)

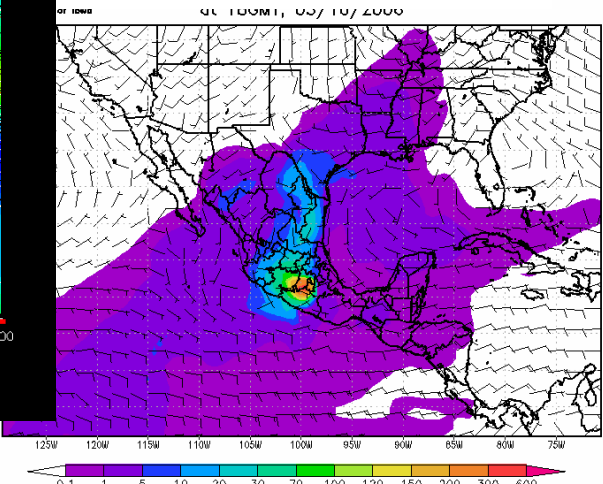


RAQMS CO (320K)

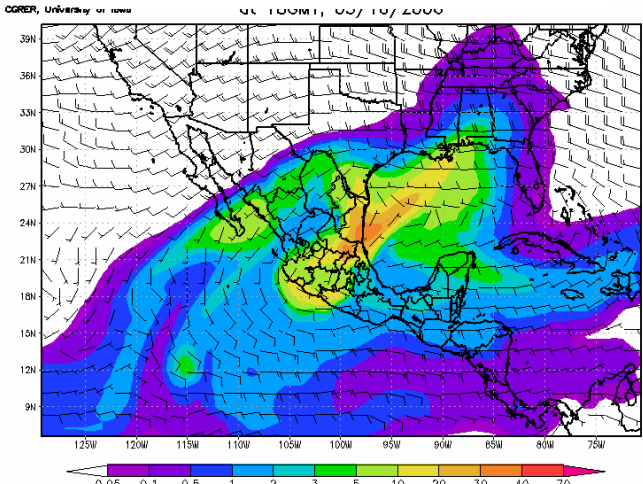


STEM MC CO

1000 m



3000 m



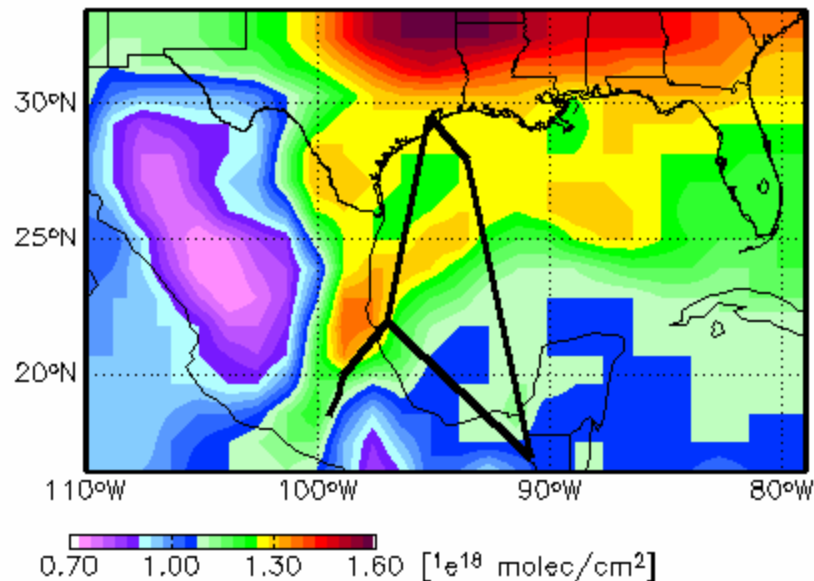
GMAO 20060313 12Z Forecast:

Thursday 03/16 18Z

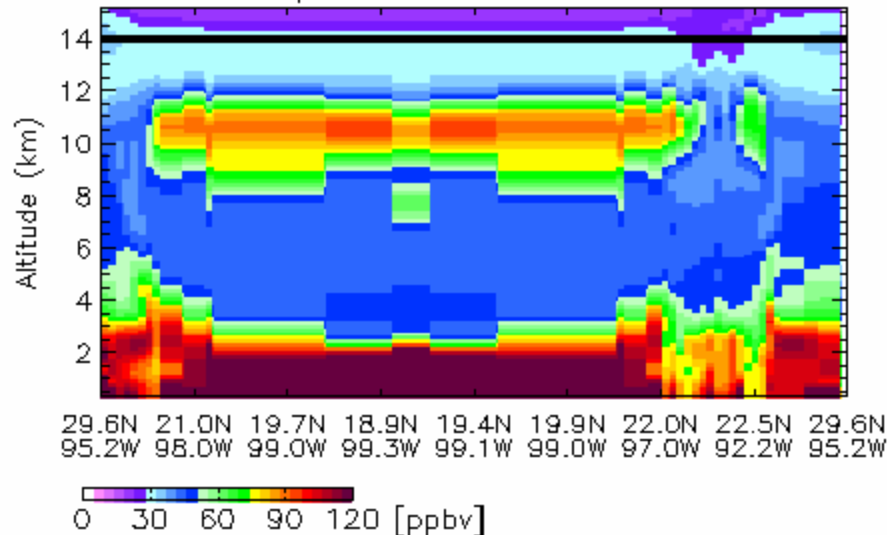
C. America FF CO

Total CO

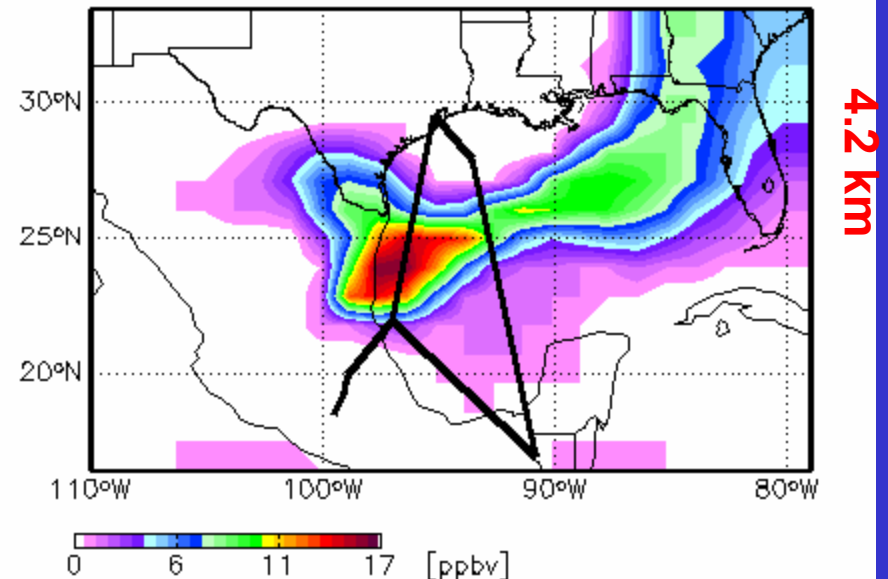
CO columns 20060316 18 GMT



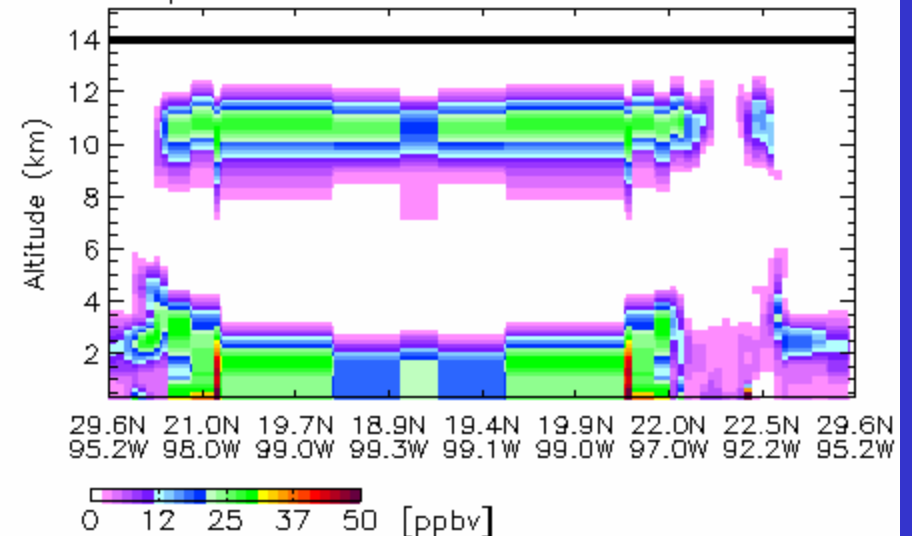
Curtain plot – CO 20060316 18 GMT



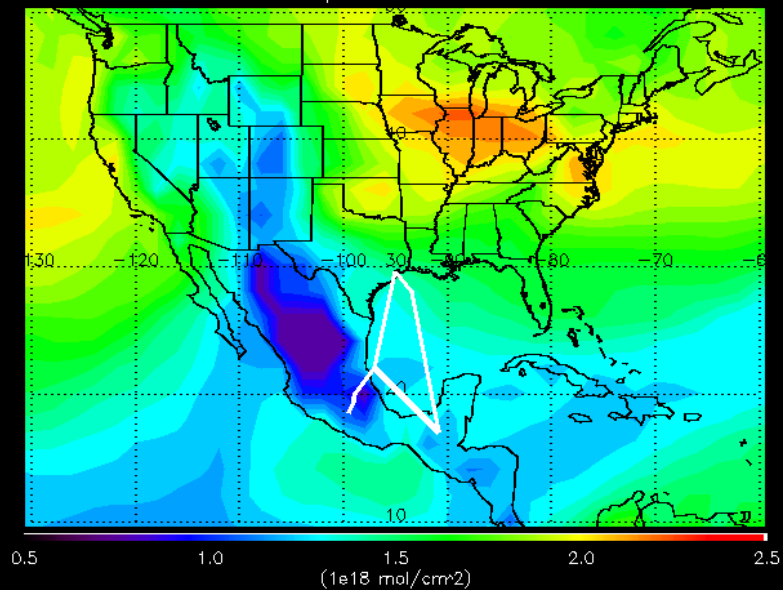
C. American FF CO 20060316 18 GMT at 600 hPa (4.2 km)



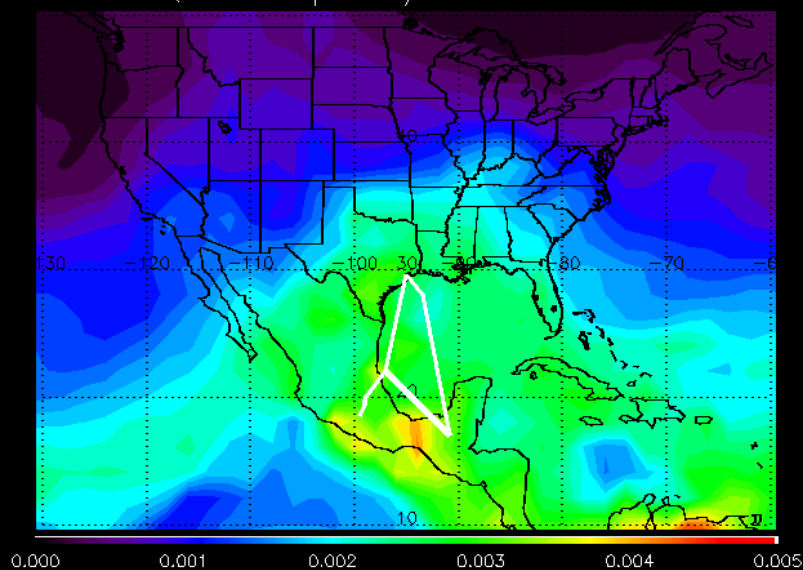
Curtain plot – C. American FF CO 20060316 18 GMT



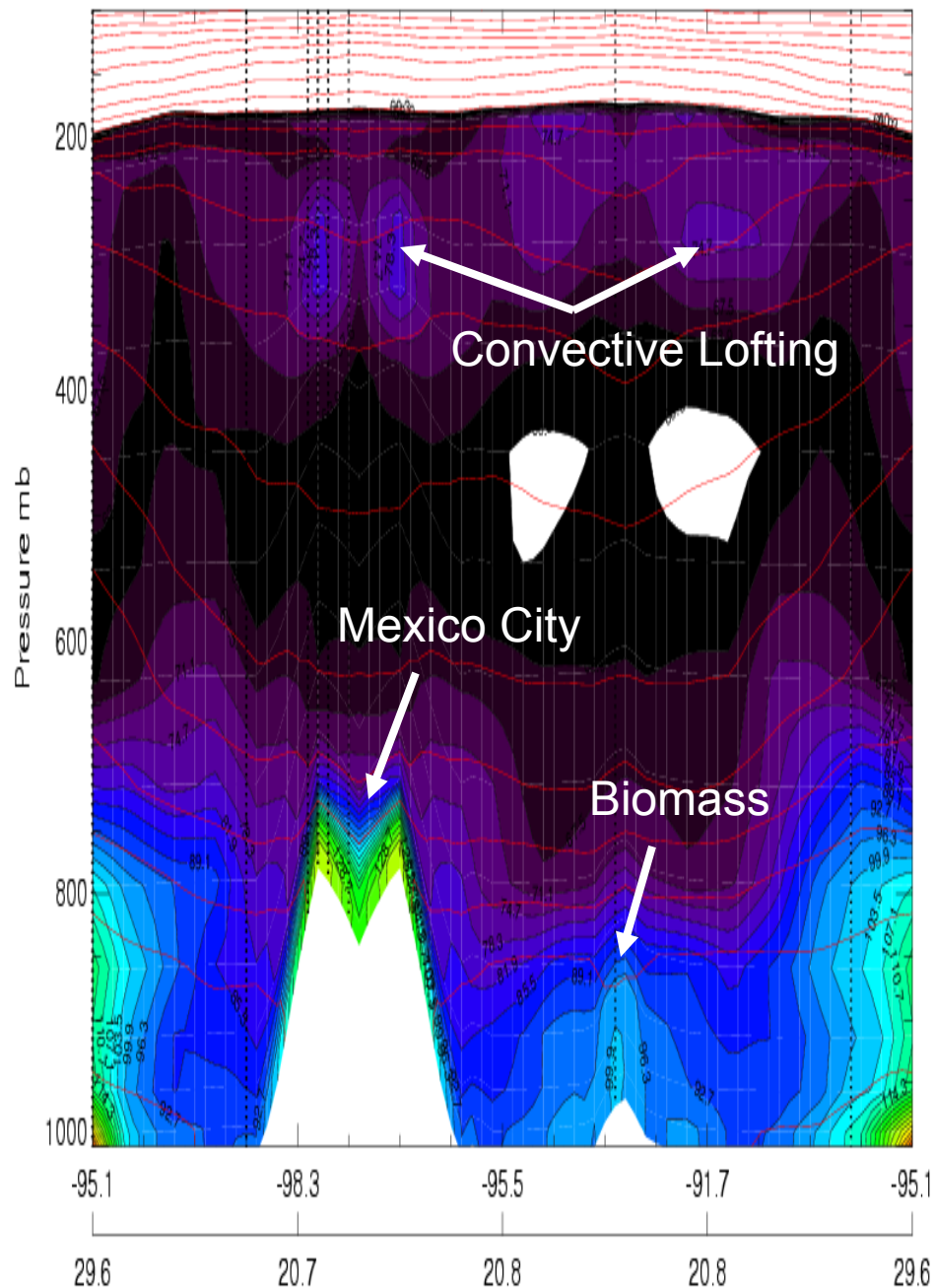
RAQMS SFC-Trop CO Column18Z 20060316



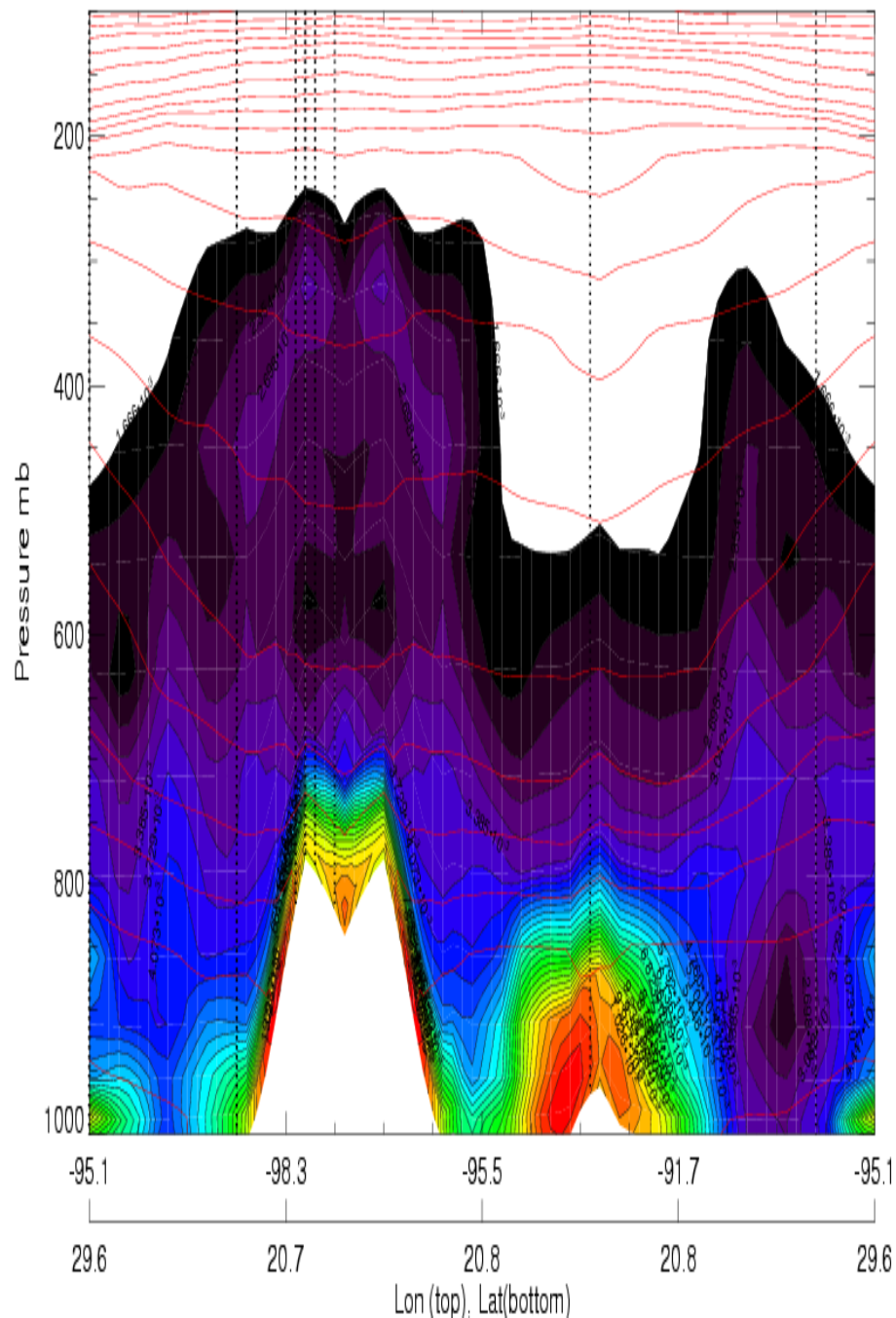
RAQMS SFC-Trop CH2O/CO Ratio18Z 20060316



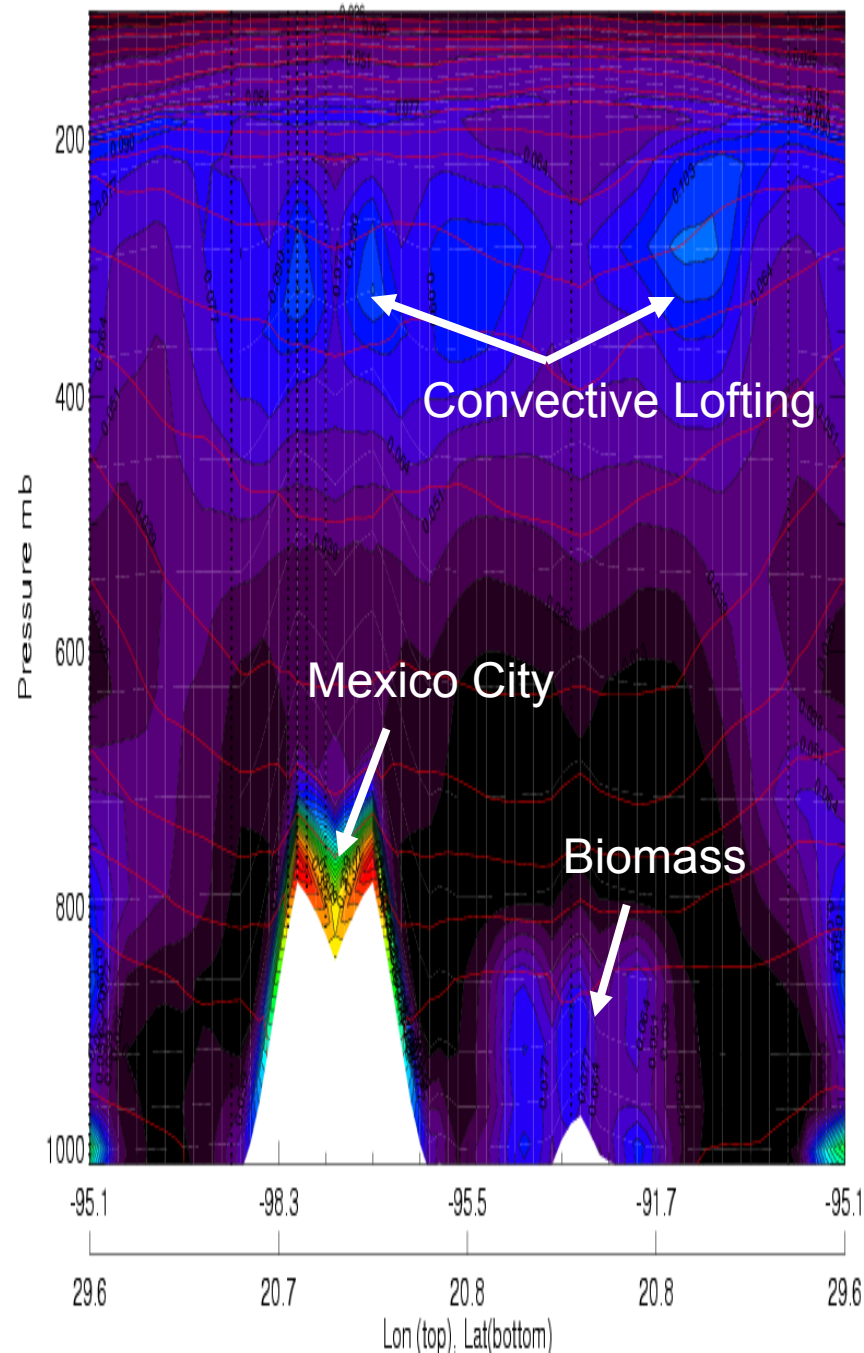
CO (ppb) Cl= 3.60263
RAQMS_20060316_18Z_78hr_fcst_curtain.dat



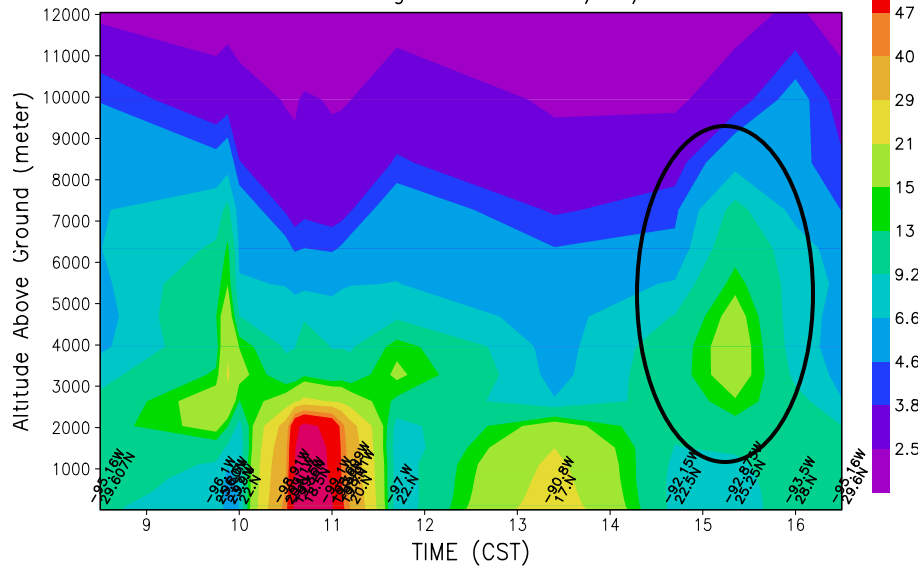
CH₂O/CO CI= 0.000343787
RAQMS_20060316_18Z_78hr_fcst_curtain.dat



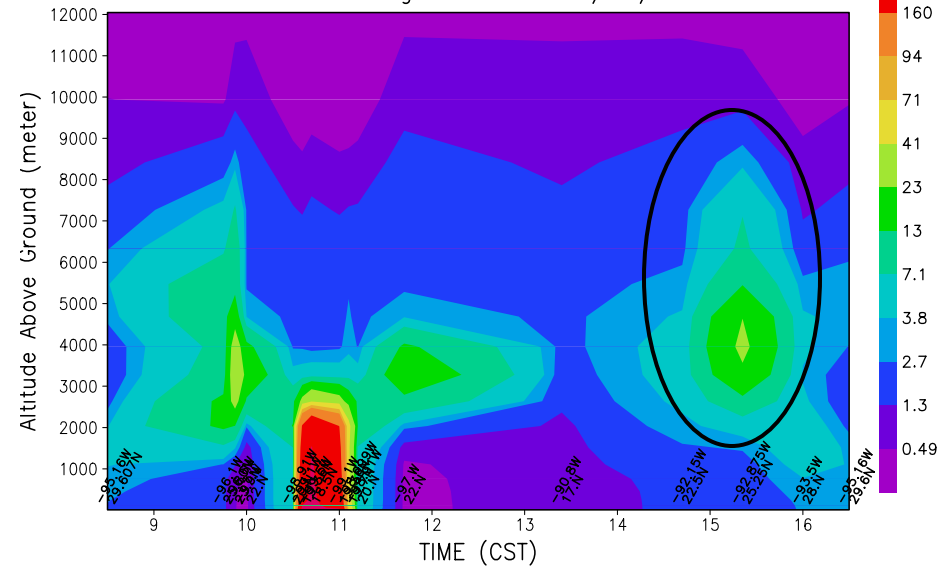
PAN(ppb) CI= 0.0128746
RAQMS_20060316_18Z_78hr_fcst_curtain.dat



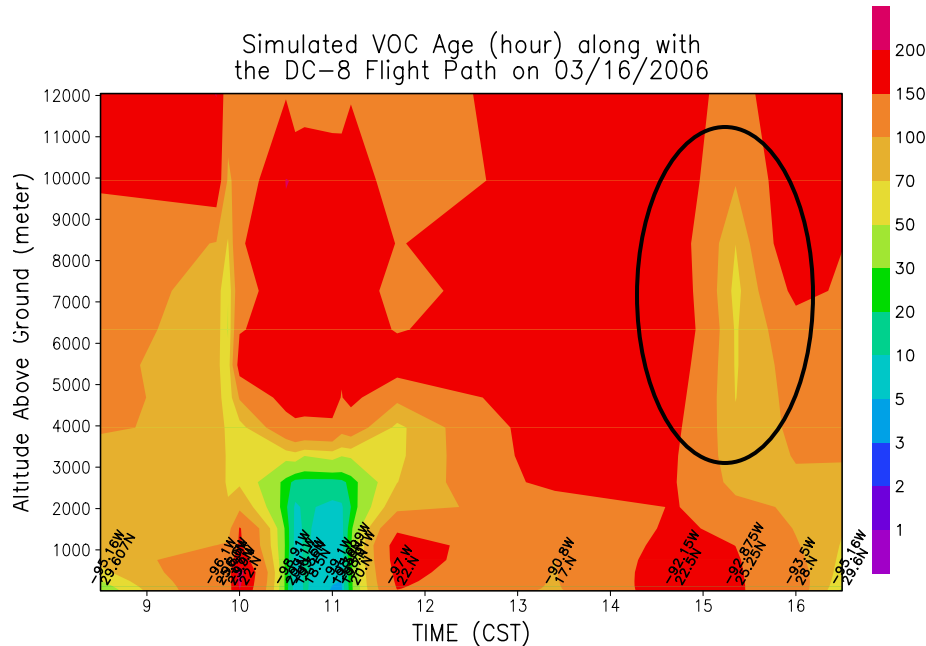
Simulated Tracer Biomass CO (ppbv) along with the DC-8 Flight Path on 03/16/2006



Simulated Tracer Mexico City CO (ppbv) along with the DC-8 Flight Path on 03/16/2006



Simulated VOC Age (hour) along with the DC-8 Flight Path on 03/16/2006



Mexico City outflow will mixed with biomass burning air mass and go to downwind of Mexico city. Along the proposed Thursday flight path, we will see relatively fresh air mass from 4 - 8km

Adjoint Influence Region

**Target in Thursday flight
path in Mexico City Plume**

